

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841517

Luminaire Tested: **ARCH4-190-727-U-T2U**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P841517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-190-727-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1530mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28857 lumens  
Efficiency: N/A  
Efficacy: 151.9 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

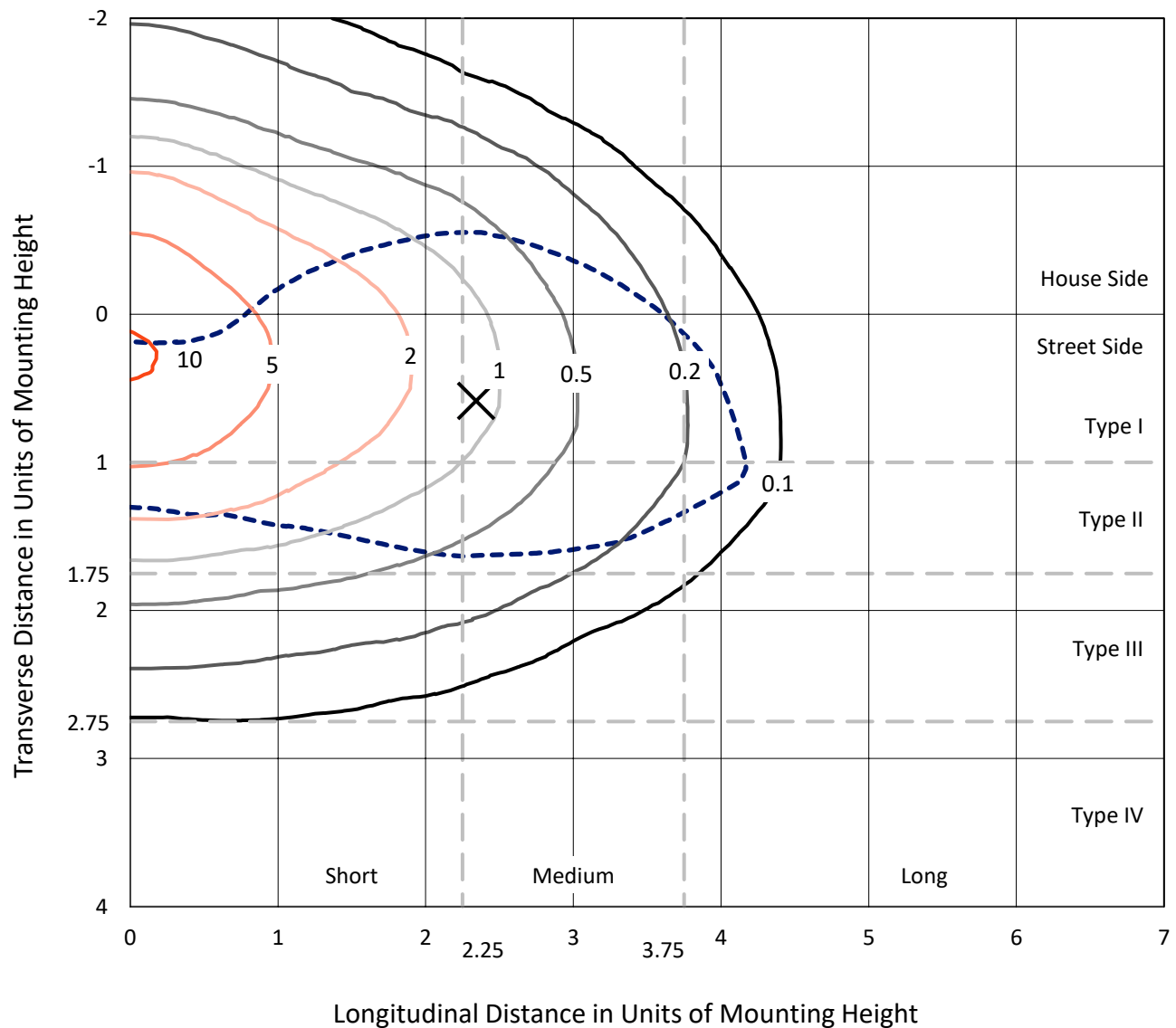
Input Watts (W): 190  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

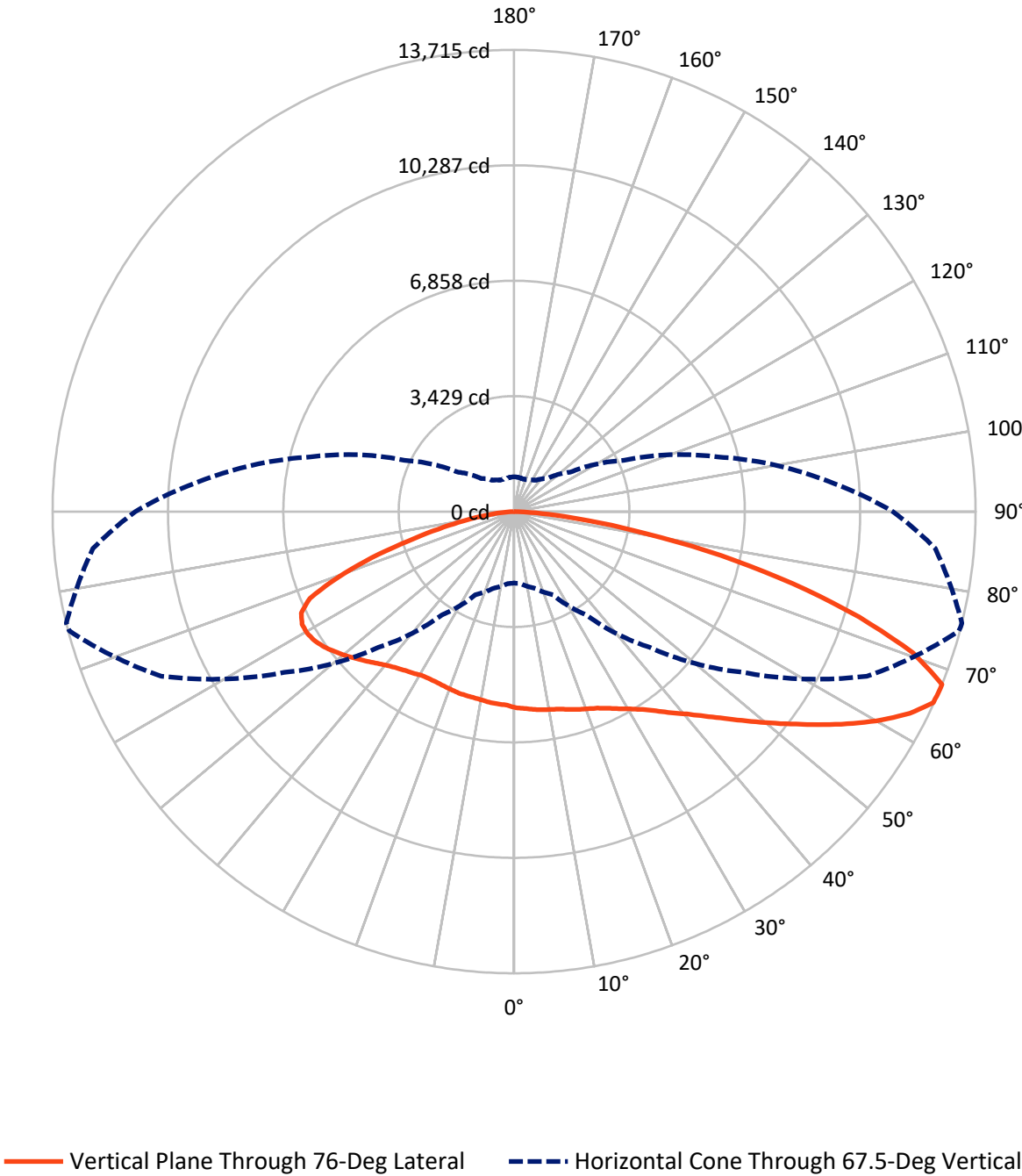
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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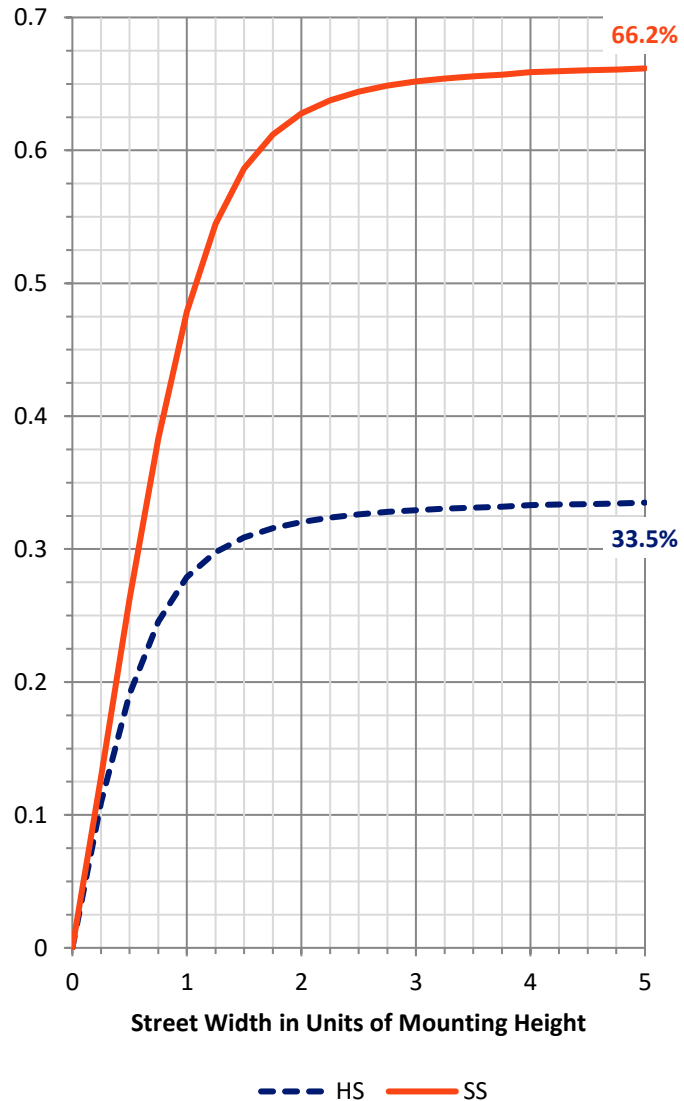
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9750.9   | 0.0    | 9750.9  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 19106.1  | 0.0    | 19106.1 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 28857.0  | 0.0    | 28857.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 562.1   | 1.9       |
| 10°-20°   | 1718.4  | 6.0       |
| 20°-30°   | 2919.6  | 10.1      |
| 30°-40°   | 4154.2  | 14.4      |
| 40°-50°   | 5246.6  | 18.2      |
| 50°-60°   | 5680.4  | 19.7      |
| 60°-70°   | 5283.4  | 18.3      |
| 70°-80°   | 2837.7  | 9.8       |
| 80°-90°   | 454.7   | 1.6       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 28857.0 | 100.0     |
| 0°-180°   | 28857.0 | 100.0     |

**Coefficient of Utilization**



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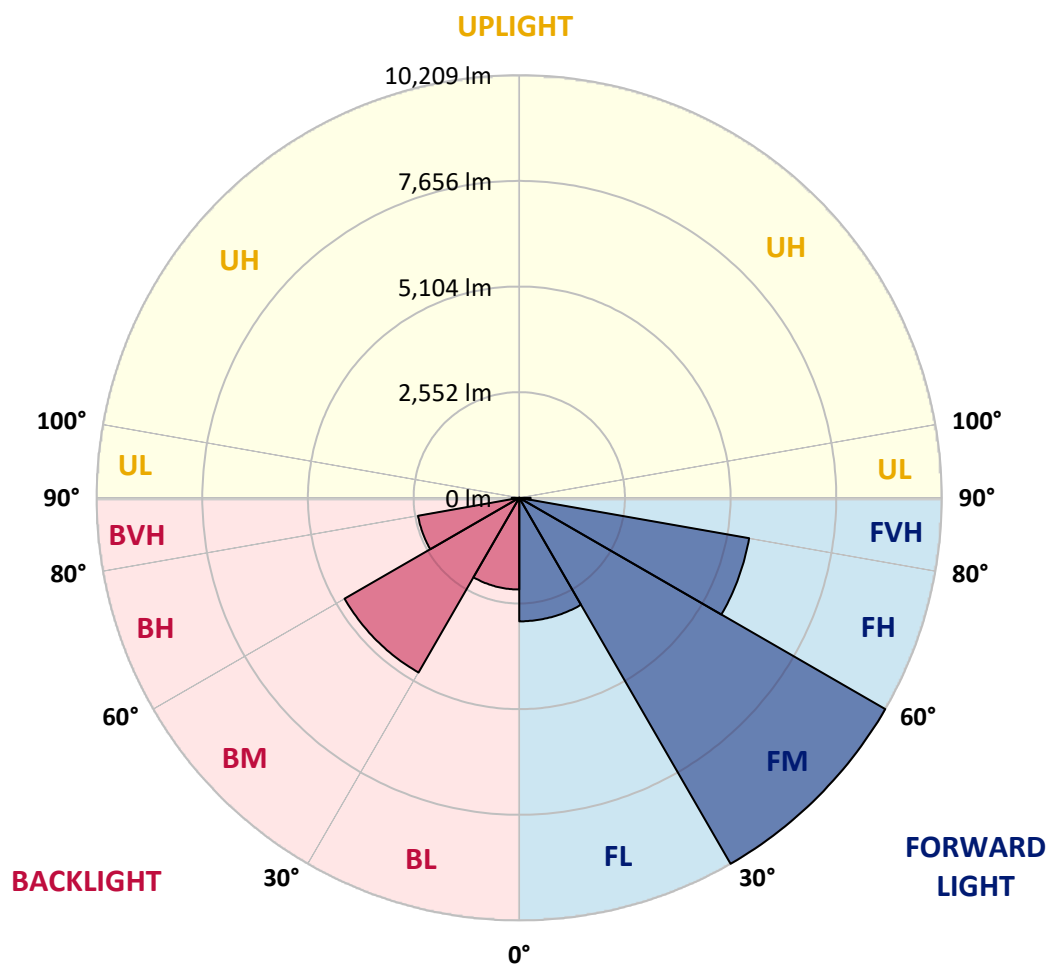
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2984.1  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 10208.5 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 5638.4  | 19.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 275.1   | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2215.9  | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4872.7  | 16.9      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2482.7  | 8.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 179.6   | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1  | 5829.1  | 5829.1  | 5829.1  | 5829.1  |
| 2.5°  | 6005.9 | 5995.1 | 5952.3 | 5957.6 | 5957.6 | 5952.3 | 5888.0  | 5861.2  | 5861.2  | 5855.8  | 5796.9  |
| 5°    | 6220.2 | 6204.1 | 6155.9 | 6145.1 | 6123.7 | 6096.9 | 5995.1  | 5936.2  | 5909.4  | 5904.1  | 5823.7  |
| 7.5°  | 6472.0 | 6450.5 | 6391.6 | 6359.5 | 6305.9 | 6236.2 | 6107.6  | 6016.6  | 5952.3  | 5946.9  | 5834.4  |
| 10°   | 6723.8 | 6702.3 | 6632.7 | 6573.8 | 6498.7 | 6386.2 | 6220.2  | 6086.2  | 5984.4  | 5973.7  | 5839.8  |
| 12.5° | 7023.8 | 7002.4 | 6916.6 | 6841.6 | 6729.1 | 6579.1 | 6359.5  | 6177.3  | 6038.0  | 6021.9  | 5855.8  |
| 15°   | 7339.9 | 7307.7 | 7222.0 | 7136.3 | 6997.0 | 6804.1 | 6541.6  | 6300.5  | 6123.7  | 6096.9  | 5904.1  |
| 17.5° | 7602.4 | 7559.5 | 7489.9 | 7404.2 | 7248.8 | 7023.8 | 6723.8  | 6423.7  | 6204.1  | 6182.7  | 5952.3  |
| 20°   | 7827.4 | 7795.3 | 7720.3 | 7639.9 | 7473.8 | 7227.4 | 6895.2  | 6547.0  | 6279.1  | 6252.3  | 5989.8  |
| 22.5° | 8041.7 | 7998.9 | 7956.0 | 7897.1 | 7714.9 | 7441.7 | 7093.4  | 6697.0  | 6375.5  | 6343.4  | 6038.0  |
| 25°   | 8288.2 | 8240.0 | 8223.9 | 8191.7 | 7977.4 | 7698.8 | 7334.5  | 6884.5  | 6509.5  | 6472.0  | 6123.7  |
| 27.5° | 8593.6 | 8540.0 | 8507.8 | 8507.8 | 8250.7 | 7961.4 | 7591.7  | 7104.2  | 6664.8  | 6632.7  | 6230.9  |
| 30°   | 8915.0 | 8850.7 | 8802.5 | 8802.5 | 8513.2 | 8223.9 | 7843.5  | 7323.8  | 6841.6  | 6804.1  | 6370.2  |
| 32.5° | 9199.0 | 9134.7 | 9081.1 | 9075.7 | 8775.7 | 8486.4 | 8106.0  | 7564.9  | 7055.9  | 7007.7  | 6541.6  |
| 35°   | 9418.6 | 9359.7 | 9311.5 | 9322.2 | 9038.2 | 8754.3 | 8400.7  | 7886.4  | 7323.8  | 7270.2  | 6766.6  |
| 37.5° | 9552.6 | 9531.1 | 9504.4 | 9541.9 | 9279.3 | 9011.5 | 8706.1  | 8197.1  | 7629.2  | 7581.0  | 7045.2  |
| 40°   | 9622.2 | 9606.1 | 9713.3 | 9761.5 | 9482.9 | 9241.8 | 9011.5  | 8518.6  | 7961.4  | 7907.8  | 7366.7  |
| 42.5° | 9724.0 | 9858.0 | 9900.8 | 9890.1 | 9632.9 | 9418.6 | 9290.0  | 8866.8  | 8352.5  | 8304.3  | 7752.4  |
| 45°   | 9359.7 | 9327.6 | 9563.3 | 9691.9 | 9643.6 | 9531.1 | 9552.6  | 9284.7  | 8807.9  | 8759.6  | 8197.1  |
| 47.5° | 8872.2 | 8829.3 | 8963.2 | 9279.3 | 9466.8 | 9574.0 | 9788.3  | 9718.7  | 9332.9  | 9290.0  | 8716.8  |
| 50°   | 7843.5 | 7902.4 | 8400.7 | 8823.9 | 9193.6 | 9563.3 | 9986.5  | 10184.8 | 9911.5  | 9868.7  | 9274.0  |
| 52.5° | 6702.3 | 6761.3 | 7281.0 | 8256.0 | 8861.4 | 9482.9 | 10131.2 | 10650.9 | 10538.4 | 10490.1 | 9868.7  |
| 55°   | 5871.9 | 6000.5 | 6589.8 | 7297.0 | 8390.0 | 9231.1 | 10216.9 | 11127.7 | 11213.4 | 11170.6 | 10516.9 |
| 57.5° | 5046.8 | 5143.3 | 5588.0 | 6214.8 | 7747.1 | 8791.8 | 10211.6 | 11572.4 | 11920.6 | 11877.8 | 11175.9 |
| 60°   | 4077.1 | 4200.3 | 4553.9 | 5229.0 | 6889.9 | 8266.8 | 10061.5 | 11920.6 | 12601.0 | 12568.9 | 11813.5 |
| 62.5° | 3412.8 | 3450.3 | 3702.1 | 4286.1 | 5786.2 | 7602.4 | 9724.0  | 12108.1 | 13217.2 | 13195.7 | 12386.7 |
| 65°   | 2748.4 | 2753.8 | 2984.2 | 3471.7 | 4720.0 | 6777.3 | 9150.8  | 12038.5 | 13683.3 | 13694.0 | 12799.3 |
| 67.5° | 2121.6 | 2148.4 | 2357.3 | 2727.0 | 3750.3 | 5705.8 | 8331.0  | 11567.0 | 13688.6 | 13715.4 | 12563.5 |
| 70°   | 1468.0 | 1489.4 | 1805.5 | 2164.5 | 2898.5 | 4548.6 | 7222.0  | 10318.7 | 12563.5 | 12585.0 | 11261.6 |
| 72.5° | 1034.0 | 1044.7 | 1382.3 | 1730.5 | 2266.3 | 3428.9 | 5448.7  | 8534.6  | 10709.8 | 10725.9 | 9472.2  |
| 75°   | 771.5  | 782.2  | 975.1  | 1312.6 | 1735.9 | 2373.4 | 3723.5  | 6536.3  | 8556.1  | 8556.1  | 7479.2  |
| 77.5° | 546.5  | 551.8  | 632.2  | 905.4  | 1157.2 | 1601.9 | 2239.5  | 4280.7  | 6279.1  | 6289.8  | 5448.7  |
| 80°   | 369.7  | 375.0  | 412.5  | 610.8  | 723.3  | 867.9  | 1216.2  | 2244.8  | 3959.3  | 3975.3  | 3461.0  |
| 82.5° | 192.9  | 203.6  | 230.4  | 310.7  | 364.3  | 482.2  | 626.8   | 1141.2  | 2191.3  | 2234.1  | 2078.7  |
| 85°   | 75.0   | 75.0   | 85.7   | 101.8  | 133.9  | 187.5  | 289.3   | 434.0   | 991.2   | 1023.3  | 916.1   |
| 87.5° | 26.8   | 26.8   | 32.1   | 32.1   | 37.5   | 42.9   | 48.2    | 64.3    | 112.5   | 112.5   | 107.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5829.1  | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 | 5829.1 |
| 2.5°  | 5775.5  | 5775.5 | 5748.7 | 5759.4 | 5754.0 | 5743.3 | 5732.6 | 5748.7 | 5732.6 | 5695.1 | 5689.8 |
| 5°    | 5786.2  | 5775.5 | 5732.6 | 5727.3 | 5711.2 | 5689.8 | 5663.0 | 5673.7 | 5646.9 | 5614.7 | 5609.4 |
| 7.5°  | 5791.5  | 5770.1 | 5711.2 | 5689.8 | 5657.6 | 5614.7 | 5571.9 | 5571.9 | 5534.4 | 5502.2 | 5496.9 |
| 10°   | 5780.8  | 5754.0 | 5673.7 | 5630.8 | 5571.9 | 5507.6 | 5448.7 | 5432.6 | 5389.7 | 5352.2 | 5352.2 |
| 12.5° | 5786.2  | 5748.7 | 5646.9 | 5577.2 | 5496.9 | 5416.5 | 5341.5 | 5320.1 | 5282.6 | 5245.1 | 5239.7 |
| 15°   | 5818.3  | 5764.8 | 5636.2 | 5545.1 | 5427.2 | 5336.2 | 5255.8 | 5239.7 | 5207.6 | 5180.8 | 5180.8 |
| 17.5° | 5850.5  | 5780.8 | 5620.1 | 5491.5 | 5346.9 | 5245.1 | 5170.1 | 5170.1 | 5148.6 | 5132.6 | 5132.6 |
| 20°   | 5866.6  | 5786.2 | 5588.0 | 5416.5 | 5250.4 | 5143.3 | 5073.6 | 5084.3 | 5079.0 | 5073.6 | 5073.6 |
| 22.5° | 5904.1  | 5796.9 | 5561.2 | 5346.9 | 5148.6 | 5036.1 | 4971.8 | 4987.9 | 4982.6 | 4982.6 | 4987.9 |
| 25°   | 5963.0  | 5823.7 | 5539.7 | 5282.6 | 5052.2 | 4929.0 | 4859.3 | 4870.0 | 4870.0 | 4870.0 | 4870.0 |
| 27.5° | 6043.4  | 5877.3 | 5534.4 | 5223.6 | 4955.8 | 4816.5 | 4730.7 | 4730.7 | 4709.3 | 4714.7 | 4720.0 |
| 30°   | 6166.6  | 5979.1 | 5545.1 | 5170.1 | 4854.0 | 4677.2 | 4575.4 | 4559.3 | 4553.9 | 4564.7 | 4570.0 |
| 32.5° | 6316.6  | 6118.4 | 5609.4 | 5132.6 | 4746.8 | 4521.8 | 4393.2 | 4387.9 | 4371.8 | 4371.8 | 4371.8 |
| 35°   | 6504.1  | 6252.3 | 5668.3 | 5127.2 | 4639.7 | 4355.7 | 4216.4 | 4200.3 | 4162.8 | 4146.8 | 4146.8 |
| 37.5° | 6745.2  | 6461.2 | 5738.0 | 5089.7 | 4548.6 | 4195.0 | 4028.9 | 3975.3 | 3932.5 | 3927.1 | 3927.1 |
| 40°   | 7039.9  | 6697.0 | 5839.8 | 5046.8 | 4452.2 | 4028.9 | 3809.2 | 3718.2 | 3723.5 | 3745.0 | 3745.0 |
| 42.5° | 7388.1  | 6986.3 | 5968.3 | 5025.4 | 4312.9 | 3857.5 | 3552.1 | 3444.9 | 3482.4 | 3503.9 | 3509.2 |
| 45°   | 7795.3  | 7329.2 | 6113.0 | 4998.6 | 4184.3 | 3664.6 | 3278.8 | 3144.9 | 3161.0 | 3166.3 | 3171.7 |
| 47.5° | 8266.8  | 7709.6 | 6263.0 | 4977.2 | 4039.6 | 3423.5 | 2978.8 | 2802.0 | 2796.7 | 2764.5 | 2775.2 |
| 50°   | 8759.6  | 8111.4 | 6418.4 | 4939.7 | 3862.8 | 3139.5 | 2662.7 | 2453.8 | 2410.9 | 2362.7 | 2368.1 |
| 52.5° | 9284.7  | 8523.9 | 6563.0 | 4880.8 | 3643.2 | 2850.2 | 2362.7 | 2137.7 | 2052.0 | 1998.4 | 2009.1 |
| 55°   | 9863.3  | 8947.2 | 6702.3 | 4789.7 | 3412.8 | 2560.9 | 2094.8 | 1864.4 | 1757.3 | 1714.4 | 1719.8 |
| 57.5° | 10393.7 | 9354.3 | 6804.1 | 4677.2 | 3161.0 | 2298.4 | 1859.1 | 1634.1 | 1564.4 | 1559.1 | 1564.4 |
| 60°   | 10908.0 | 9697.2 | 6847.0 | 4521.8 | 2903.8 | 2057.3 | 1639.4 | 1468.0 | 1419.8 | 1446.5 | 1451.9 |
| 62.5° | 11342.0 | 9916.9 | 6825.6 | 4312.9 | 2641.3 | 1826.9 | 1462.6 | 1339.4 | 1307.3 | 1360.8 | 1366.2 |
| 65°   | 11593.8 | 9986.5 | 6675.5 | 4012.8 | 2357.3 | 1601.9 | 1296.5 | 1162.6 | 1146.5 | 1178.7 | 1194.7 |
| 67.5° | 11261.6 | 9552.6 | 6268.4 | 3600.3 | 2041.2 | 1393.0 | 1135.8 | 1028.7 | 1001.9 | 1028.7 | 1028.7 |
| 70°   | 9981.2  | 8277.5 | 5304.0 | 2946.7 | 1693.0 | 1189.4 | 985.8  | 910.8  | 889.4  | 910.8  | 905.4  |
| 72.5° | 8315.0  | 6884.5 | 4178.9 | 2298.4 | 1334.0 | 1001.9 | 857.2  | 787.6  | 766.1  | 744.7  | 734.0  |
| 75°   | 6450.5  | 5229.0 | 3032.4 | 1687.6 | 1007.2 | 803.6  | 717.9  | 653.6  | 600.0  | 621.5  | 610.8  |
| 77.5° | 4725.4  | 3669.9 | 2148.4 | 1168.0 | 723.3  | 621.5  | 562.5  | 514.3  | 476.8  | 519.7  | 514.3  |
| 80°   | 3043.1  | 2373.4 | 1435.8 | 782.2  | 498.3  | 434.0  | 412.5  | 385.7  | 423.2  | 551.8  | 562.5  |
| 82.5° | 1859.1  | 1505.5 | 857.2  | 509.0  | 326.8  | 289.3  | 267.9  | 267.9  | 434.0  | 476.8  | 482.2  |
| 85°   | 830.4   | 798.3  | 466.1  | 262.5  | 182.2  | 166.1  | 150.0  | 192.9  | 176.8  | 128.6  | 133.9  |
| 87.5° | 133.9   | 139.3  | 101.8  | 91.1   | 69.6   | 69.6   | 53.6   | 37.5   | 26.8   | 16.1   | 16.1   |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)